

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 78-37

WASTE DISCHARGE REQUIREMENTS FOR:

MARE ISLAND NAVAL SHIPYARD  
HYDRAULIC MAINTENANCE DREDGING AND SPOILS DISPOSAL  
MARE ISLAND, SOLANO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Mare Island Naval Shipyard, hereinafter called the discharger, submitted a report of waste discharge dated May 5, 1978.
2. The discharger proposes to perform 600,000 cubic yards of maintenance dredging annually in Mare Island Strait which will be accomplished largely by hydraulic dredging methods. The boundary of the maintenance dredging will extend from the Highway 37 bridge on the north to Carquinez Strait on the south as shown in Attachment A incorporated herein and made a part of this Order. The maintenance dredging referred to in this Order is separate from the maintenance dredging of the main channel in Mare Island Strait conducted by the U. S. Army Corps of Engineers.
3. Dredged material will be disposed of in an 843 acre disposal pond located above mean higher high water (MHHW) on the western (San Pablo Bay) side of Mare Island as shown in Attachment A. Depending on the location of the dredging operation, dredged material will be transported to the disposal pond via one of five permanent pipelines. A maximum of 2.5 million gallons per day (MGD) of supernatant water will be discharged into Mare Island Marsh adjacent to San Pablo Bay. The discharge from the ponds will be regulated by weir structures. When the hydraulic dredge is being repaired or overhauled, a clamshell dredge will be used and the dredged material will be trucked to the designated land disposal pond.
4. The Board, in April 1975, adopted a Water Quality Control Plan for the San Francisco Bay basin. The Plan contains water quality objectives for San Pablo Bay.
5. The beneficial uses of Mare Island Strait, San Pablo Bay, and Mare Island Marsh include:
  - a. Recreation
  - b. Navigation
  - c. Fish migration and habitat
  - d. Habitat and resting for waterfowl, migratory birds and certain rare and endangered species
  - e. Industrial water supply
  - f. Commercial fishing and shellfish harvesting
  - g. Aesthetic enjoyment

6. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
7. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
8. These discharge requirements govern the waste discharge from a publicly owned Naval Shipyard maintenance dredging operation. This activity constitutes only a minor modification to land, and such activity are thereby exempt from the provisions of the California Environmental Quality Act in accordance with Section 15104, Chapter 3, Title 14, California Administrative Code.

IT IS HEREBY ORDERED, to achieve the water quality objectives and prohibitions contained in the Water Quality Control Plan that the discharger shall comply with the following:

A. Effluent Limitations

The Wastewater overflow as discharged to waters of the State from the land disposal ponds shall meet the following quality limits at all times:

1. Settleable matter    1.0 ml/l-hr, maximum
2. pH                    6.5 minimum, 8.5 maximum

B. Receiving Water Limitations

The disposal of waste or wastewater return flow shall not cause:

1. Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the point of discharge of return flow;
2. Bottom deposits or aquatic growths in waters of the State at any place;
3. Discoloration beyond present natural background levels in waters of the State at any place more than 100 feet from the point of discharge of return flow;
4. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place;

C. Prohibitions

1. The bypassing of treatment facilities and discharge of untreated waste to waters of the State is prohibited.
2. The discharge of wastewater to the adjacent marsh shall not cause bottom sediment deposits.

D. Provisions

1. The discharger shall comply with all sections of this Order immediately upon adoption.
2. The dredging, treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
3. The Regional Board will modify this Order should the discharge be found to cause adverse impacts on the adjacent marsh.
4. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.
5. Dredging operations shall cease immediately whenever violations of requirements are detected by the self-monitoring program and operations shall not resume until alternative methods of compliance are provided.
6. The dischargers shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.
7. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
8. The discharger shall permit the Regional Board:
  - (a) Entry upon premises in which an effluent source is located or in which any required records are kept,
  - (b) Access to copy any records required to be kept under terms and conditions of this Order,
  - (c) Inspection of monitoring equipment or records, and
  - (d) Sampling of any discharge.
9. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.
10. The discharger shall maintain in good working order and operate efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

11. In the event the discharger is unable to comply with any of the conditions of this Order due to:

- (a) Breakdown of waste treatment equipment;
- (b) Accidents caused by human error or negligence; or
- (c) Other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

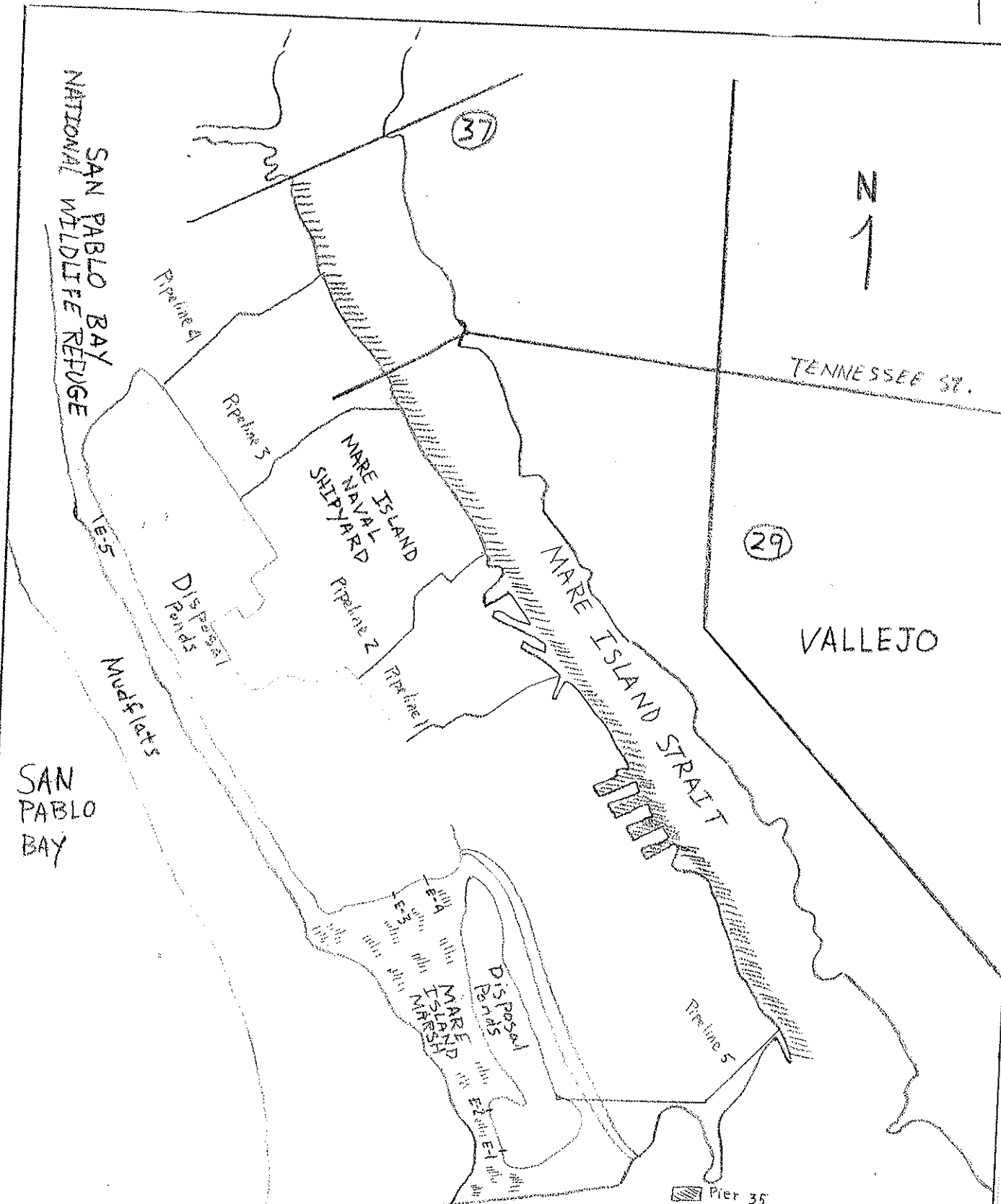
12. To prevent the development of mosquito nuisance conditions in the disposal pond or adjacent marsh, the discharger shall prepare and implement a mosquito control plan satisfactory to the Executive Officer. This plan shall be submitted no later than July 20, 1978.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 20, 1978.

FRED H. DIERKER  
Executive Officer

Attachments:

Map  
Self-Monitoring Program



//// - DREDGING  
BOUNDARY  
NOT TO SCALE

CARQUINE STRAIT

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION	
MARE ISLAND NAVAL SHIPYARD MAINTENANCE DREDGING AND DISPOSAL AREA - SOLANO COUNTY	
ATTACHMENT A	ORDER NO. 78-37

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

MARE ISLAND NAVAL SHIPYARD  
HYDRAULIC MAINTENANCE DREDGING AND SPOILS DISPOSAL  
MARE ISLAND, SOLANO COUNTY

ORDER NO. 78-37

CONSISTS OF

PART A

AND

PART B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR

MARE ISLAND NAVAL SHIPYARD  
HYDRAULIC MAINTENANCE DREDGING  
AND SPOILS DISPOSAL  
MARE ISLAND, SOLANO COUNTY

PART B

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board,
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge,
3. To develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and
4. To prepare water and wastewater quality inventories.

B. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

I. Effluent - Hydraulic Dredging Operation

<u>Station</u>	<u>Description (See Attachment A)</u>
E-1	The wastewater at the easterly most weir, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.
E-2	The wastewater at the weir west of E-1, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.
E-3	The wastewater at the weir west of E-2, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.

<u>Station</u>	<u>Description</u>
E-4	The wastewater at the weir approximately 300 feet north of E-3, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.
E-5	The wastewater at the weir west of E-3, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All "E" Stations	Grab samples to be collected once daily when discharging.	Settleable Matter pH	ml/l-hr units
	Composite sample composed of two samples taken at four hour intervals. The sample shall be taken and analyzed at seven day intervals when discharging.	Cadmium Lead	mg/l mg/l

## II. Receiving Water-Marsh Area

<u>Station</u>	<u>Description</u>
C-1	At a point located within 50 feet and under the influence of the discharge from E-1.
C-2	At a point located within 50 feet and under the influence of the discharge from E-2.
C-3	At a point located within 50 feet and under the influence of the discharge from E-3.
C-4	At a point located within 50 feet and under the influence of the discharge from E-4.
C-5	At a point located within 50 feet and under the influence of the discharge from E-5.
C-R	At a point in the marsh located one mile east of E-5.



<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analysis</u>
All "C" Stations	Once every six months beginning one month following the effective date of Order No. 78- 37 photographs shall be taken of the marsh at points provided with a wooden stake, or other suitable marker, to demonstrate compliance with Prohibition C.2. in Order No. 78- 37 .	Standard Observation*

\*Standard observations, shall be made when weekly composite samples are taken at all E stations to include:

- a. Floating and suspended materials of waste origin, (to include oil, grease, algae, and other macroscopic particulate matter) presence or absence, source, and size of affected area.
- b. Discoloration and trubidity: description of color, source, and size of affected area.
- c. Odor: presence or absence, characterization, source, and distance of travel.
- d. Bottom sediment deposits resulting from discharge: average depth of deposit, characterization, and size of affected area.

### III. Land Observation at the Disposal Ponds

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	Located along the perimeter levee of the land impoundment facility receiving dredge spoils at equidistant intervals not to exceed 300 feet. (A sketch showing the location of these station will accompany each report.)

<u>Type of Sample and Frequency</u>	<u>Observation and Analyses</u>
Observations, weekly, during periods of discharge	All standard observations as follows:
(1) Determine hieght of the freeboard at lowest point of dikes confining liquid wastes.	
(2) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)	
(3) Evidence of low points in dike resulting in overflow of water other than described in Report of Waste Discharge. Low points shall be filled immediately with appropriate fill material.	

C. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

- (a) Maintenance work, power failure, or breakdown of waste treatment equipment, or
- (b) Accidents caused by human error or negligence, or
- (c) Other causes, such as acts of nature,

The discharger shall notify the Regional Board Office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

2. Self-Monitoring Reports

Written reports shall be submitted regularly for each calendar month during dredging operations by the fifteenth day of the following month.

The reports shall be in letter form, and shall specifically cover each point in the Monitoring Program. Any violations shall be clearly identified, and actions taken or planned for correcting violations shall be included. Monitoring reports shall be signed by the Commanding Officer of Mare Island Naval Shipyard or an authorized representative.

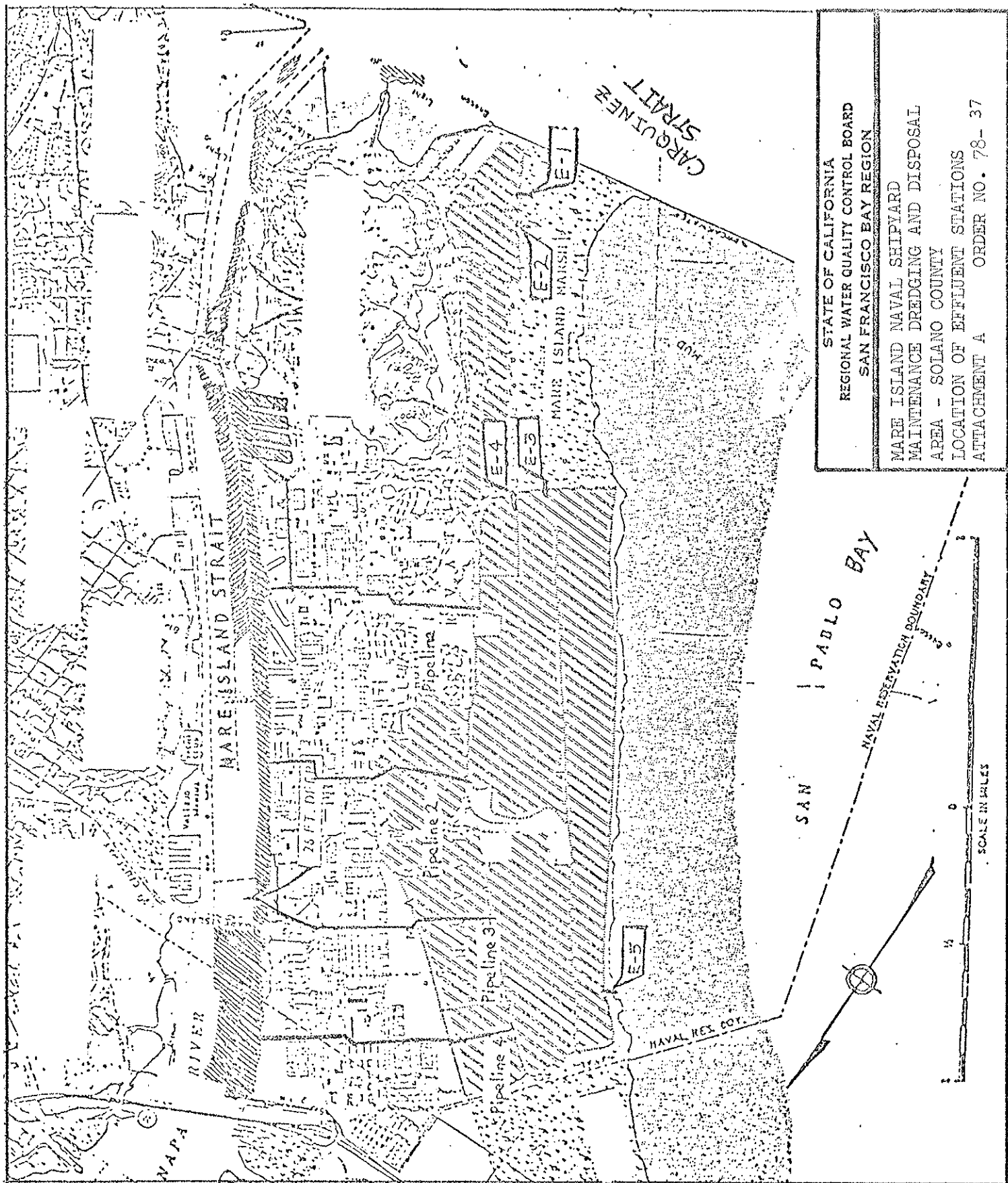
I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 78-37.
- 2. Has been ordered by the Executive Officer on June 20, 1978, and becomes effective immediately.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER  
Executive Officer

Attachments:

Attachment A - Map



STATE OF CALIFORNIA  
 REGIONAL WATER QUALITY CONTROL BOARD  
 SAN FRANCISCO BAY REGION  
 MARE ISLAND NAVAL SHIPYARD  
 MAINTENANCE DREDGING AND DISPOSAL  
 AREA - SOLANO COUNTY  
 LOCATION OF EFFLUENT STATIONS  
 ATTACHMENT A ORDER NO. 78- 37